

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An input/output interface suitable for communicatively coupling a host with a target device, comprising:
 - at least one port communicatively coupling the input/output interface with a host;
 - at least one port communicatively coupling the input/output interface with a target; and
 - a controller communicatively coupled to the at least one port communicatively coupling the input/output interface with the host and the at least one port communicatively coupling the input/output interface with the target, wherein the controller receives an identifier from the host, the identifier indicating the target's address, the controller generates a logical identifier from the identifier, the logical identifier suitable for being utilized in conjunction with a look-up table to provide access to the target, wherein the target is selectively allocated to one and only one host and the controller generates the logical identifier by shifting at least one of a bus field and ID field to create a linear value.
2. (Canceled)
3. (Currently Amended) The input/output interface as described in claim 1 [[2]], wherein the bus field of the identifier is shifted to create a linear value with the ID field.
4. (Currently Amended) The input/output interface as described in claim 1 [[2]], wherein a number of shifts performed is based upon a number of ID [[Id]] fields per bus field supported by an OS operating on the host.

5. (Currently Amended) The input/output interface as described in claim 1 [[2]], wherein at least one of the bus field and the ID field is 8-bits.
6. (Original) The input/output interface as described in claim 1, wherein the logical identifier is utilized to index the look-up table.
7. (Original) The input/output interface as described in claim 1, wherein the target is selectively allocated by a target masking configuration utility.
8. (Original) The input/output interface as described in Claim 7, wherein the target masking configuration utility is implemented as a software program.
9. (Original) The input/output interface as described in Claim 7, wherein the target masking configuration utility communicates with at least one other target masking configuration utility.
10. (Original) The input/output interface as described in Claim 9, wherein the target masking filter is wholly contained within the input/output interface and communicates with at least one other host through an agent contained within the input/output interface.
11. (Original) The input/output interface as described in Claim 10, wherein the agent of the input/output interface is in communication with other agents of other input/output interfaces of other hosts.
12. (Original) The input/output interface as described in Claim 11, wherein the communication is through a local area network (LAN).

13. (Currently Amended) A method for providing data transfer between a host with a target utilizing an input/output interface, comprising:

receiving an identifier including a bus field and an ID field from the host;
generating a logical identifier from the received identifier;
referencing a look-up table utilizing the logical identifier to provide access to the target; and
allocating the target to the input/output interface via integrated target masking,
wherein generating the logical identifier includes shifting at least one of the bus field and the ID field to form a linear value.

14. (Canceled)

15. (Currently Amended) The method as described in claim 13 [[14]], wherein the bus field of the identifier is shifted to create a linear value with the ID field.

16. (Currently Amended) The method as described in claim 13 [[14]], wherein a number of shifts performed is based upon a number of ID [[Id]] fields per bus field supported by an OS operating on the host.

17. (Original) The method as described in claim 13, wherein at least one of the bus field and the ID field is 8-bits.

18. (Original) The method as described in claim 13, wherein referencing includes utilizing the logical identifier to index the look-up table.

19. (Original) An input/output interface suitable for communicatively coupling a host with a target device, comprising:
 - at least one port communicatively coupling the input/output interface with a host;
 - at least one port communicatively coupling the input/output interface with a target; and

a controller communicatively coupled to the at least one port communicatively coupling the input/output interface with the host and the at least one port communicatively coupling the input/output interface with the target, wherein the controller receives an identifier including a bus field and an ID field from the host, the controller shifts at least one of the bus field and the ID field into a linear value to generate a logical identifier, the logical identifier suitable for being utilized in conjunction with a look-up table to provide access to the target, the controller including a target masking configuration utility,
20. (Currently Amended) The input/output interface as described in claim 19, wherein a number of shifts performed is based upon a number of ID [[Id]] fields per bus field supported by an OS operating on the host.
21. (Original) The input/output interface as described in claim 19, wherein at least one of the bus field and the ID field is 8-bits.
22. (Original) The input/output interface as described in claim 19, wherein the logical identifier is utilized to index the look-up table.

23. (Currently Amended) An input/output interface suitable for communicatively coupling a host with a target device, comprising:

at least one means for communicatively coupling the input/output interface with a host;

at least one means for communicatively coupling the input/output interface with a target; and

a means for controlling communicatively coupled to the at least host coupling means and the at least one target coupling means, wherein the controlling means receives a means for identifying including a bus field and an ID field from the host, the controlling means generates a means for logically identifying from the received identifying means, the logical identifying means suitable for being utilized in conjunction with a look-up table to provide access to the target, the controlling means including a target masking configuration utility which selectively assigns the target to one of two or more hosts so that the look-up table is populated with fewer targets than a maximum number of targets,

wherein the controlling means generates the logical identifying means by shifting at least one of the bus field and ID field to create a linear value.

24. (Canceled)

25. (Currently Amended) The input/output interface as described in claim 23 24, wherein a number of shifts performed is based upon a number of ID [[Id]] fields per bus field supported by an OS operating on the host.

26. (Original) The input/output interface as described in claim 23, wherein the logical identifier is utilized to index the look-up table.

27. - 42. (Canceled)